IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:

James C. Peterson

Application No.:   10/620,960

Filed: July 16, 2003

For: Method And System For
Strongly Encrypting .Zip Files

Examiner: Minh Dinh

Group Art Unit: 2132

EV 164035376 US	
Express Mail No.	
January 5, 2007	
Date	

DECLARATIONS OF JAMES C. PETERSON

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Examiner Dinh:

I, James C. Peterson, declare as follows:

BACKGROUND

1.   I hold a B.S. degree from the University of Wisconsin-Milwaukee, which I earned in 1981.

2.   I am currently employed as Chief Scientist at PKWARE, Inc., where I have been employed since 1994. Including my present and previous employers, I have over 20 years of experience in software development.

Application No. 10/620,960
Attorney Docket No. 009785-0139 (15895US01)

DECLARATION UNDER 37 CFR 1.131WITH REGARD TO THE
REJECTION UNDER 35 U.S.C. §102(a) IN LIGHT OF SPECTOR

3.   The date of publication printed on the first page of Spector ("Updated WinZip

Alters Zip Format") is May 20, 2003, approximately two months before the filing date of

the present application. Consequently, I have been informed that May 20, 2003 is the

effective priority date for Spector for the purpose of establishing a *prima facie* case

necessary to support the present rejection under 35 U.S.C. §102(a).

4.   However, the innovation(s) recited in the present claims were conceived and

reduced to practice, in this country, by me before May 20, 2003, Spector's effective

priority date.

5.   To further establish conception and reduction to practice prior to May 20, 2003, I

submit the enclosed document entitled "PKZIP® 5.00 for Windows Getting Started

Manual" ("the Manual"). The publication of the Manual took place prior to May 20,

2003. Further, as independent corroboration, as shown on the second page of the

Manual, the Manual includes a Copyright date of 2002. With reference to the subject

matter recited in the present claims, the Examiner's attention is especially drawn to the

section entitled "Strong Encryption".

6.   The Manual is the user manual for a product release that took place prior to May

20, 2003. The release of the product is further evidence of reduction to practice in this

country before May 20, 2003.

**DECLARATION UNDER 37 CFR 1.132 WITH REGARD TO THE
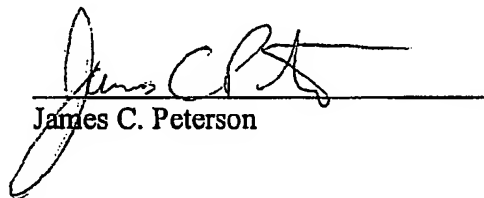REJECTION UNDER 35 U.S.C. §102(b) IN LIGHT OF STRAND**

7.   I have reviewed the Strand reference, U.S. Pat. No. 6,934,836, especially the
sections indicated by the Examiner that address the teachings of compression and
encryption. I note that the Strand reference was filed on December 27, 2001.

8.   Beginning at approximately Col. 12, Line 25, I note that Strand recites only three
programs for use in providing compression: PKZip, WinZip, and gzip. More specifically,
although Strand recites that several compression algorithms may be used, the only actual
examples of compression programs that are recited are PKZip, WinZip, and gzip.

9.   I am aware of the features and abilities of the PKZip, WinZip, and gzip
applications that were offered as of December 27, 2001. None of the PKZip, WinZip,
and gzip applications provided a user with the ability to perform DES encryption,
especially not at greater than 128 bits.

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I hereby declare that all statements made herein of my own knowledge are true

and that all statements made on information and belief are believed to be true; and further

that these statements were made with the knowledge that willful false statements and the

like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title

18 of the United States Code and that such willful false statements may jeopardize the

validity of the application or any patent issued thereon

Respectfully submitted,

Date: _____January 5, 2007_____   _____
                                              James C. Peterson

PKZIP® 5.00

for Windows

Getting Started Manual

PKWARE INC.

The Data Compression Experts®

Table of Contents

Operating System Requirements

PKZiP for Windows is intended for use on Microsoft Windows 98,Me, NT 4.0, 2000, and XP systems. Systems running NT 4.0 require Microsoft Internet Explorer 4.0 or later. PKZIP uses several system security files installed in conjunction with Internet Explorer. Therefore, Internet Explorer version 4.0, or later must reside on your system prior to installing PKZIP for Windows.

If you plan to use the Strong Encryption feature available in PKZIP for Windows 5.0 or newer, you must use Microsoft Internet Explorer 4.0 or newer.

If you plan to use the Digital Signature feature available with PKZIP for Windows, you must also obtain and install a valid Digital Certificate onto your system prior to using this feature. Visit PKWARE's website for information on where you can get a Digital Certificate.

Version:	Minimum System Requirements:
Windows 98, Me	32 MB RAM; 3.1 MB hard disk space for programs and minimal workspace.
Windows NT 4.0, 2000, XP	64 MB RAM; 3.1 MB hard disk space for programs and minimal workspace.

Installing PKZIP for Windows

To install from CD-ROM:

1. Insert the CD into your drive. The Autorun feature automatically starts the setup program. If the Autorun feature is not enabled on your system, you can run SETUP.EXE directly from the CD.

2. After the setup program has started, follow the provided on-screen instructions to complete the installation.

To install from a PKSFX file:

If you are installing a purchased version or an evaluation version of the software downloaded from the Internet (www.pkware.com), you will receive a PKSFX self-extracting file. The Windows Installer is packaged inside the PKSFX file.

1. Run the PKSFX file to start the installation. It extracts the files needed to install the software and it automatically starts the setup program.

2. Follow the instructions provided by the setup program to complete the installation.

Note: In addition to this manual, you can refer to the online help (pkzipw.hlp) for more information on using and/or configuring PKZIP for Windows.
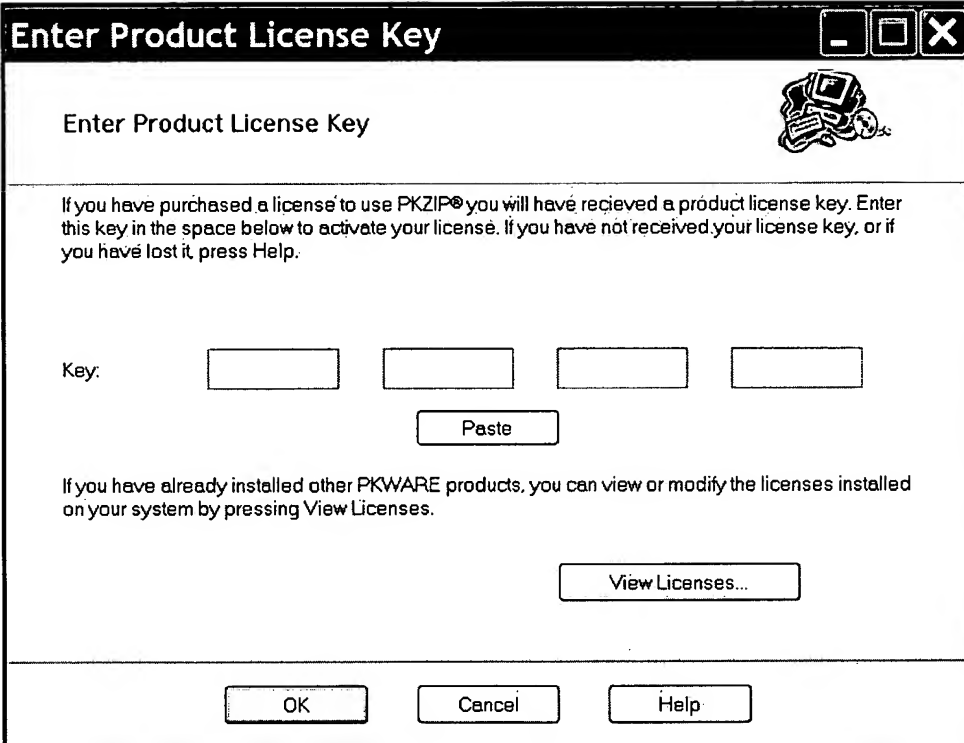
Starting PKZIP 5.0 for Windows

After you load the program onto your system, you can open it in different ways.

- Click **Start | Programs | PKZIP | PKZIP for Windows**.
- Click the PKZIP icon on your desktop.
- Click the PKZIP icon in the Quick Launch Toolbar.

License Activation

After receiving your product license key, you can activate your PKZIP license by typing the license key numbers in the entry dialog as shown below.

Enter Product License Key

Enter Product License Key

If you have purchased a license to use PKZIP® you will have recieved a product license key. Enter this key in the space below to activate your license. If you have not received your license key, or if you have lost it, press Help.

Key: [   ] [   ] [   ] [   ]

[Paste]

If you have already installed other PKWARE products, you can view or modify the licenses installed on your system by pressing View Licenses.

[View Licenses...]

[OK]   [Cancel]   [Help]

You can access this dialog from the main Help menu in PKZIP for Windows, the About Box in PKZIP Explorer, or using the Enterlicensekey option with PKZIP Command Line. You will also be able to enter your product license key periodically during the evaluation period. When the prompt appears, enter the license key you received from PKWARE, and press OK to continue.

Digital Certificates

PKZIP for Windows is intended for use on Microsoft Windows 98, Me, NT 4.0, 2000, and XP systems. If you plan to use the Digital Signature or Strong Encryption features available with PKZIP for Windows on systems running Windows NT 4.0, you must install Microsoft Internet Explorer 4.0 or later. PKZIP uses several system security files installed in conjunction with Internet Explorer. Therefore, Internet Explorer (version 4.0 or newer) must be on your system before you install PKZIP for Windows.

You must also obtain and install a valid Digital Certificate on your system before using the Digital Signature feature of PKZIP for Windows. Visit PKWARE's website for information on where you can get a Digital Certificate.

> **http://www.pkware.com/catalog/certificate.htm**

> **IMPORTANT!** Advanced security functionality is available in PKZIP Secure and PKZIP Professional.

Authenticity Verification

PKZIP allows you to embed an electronic signature with files stored in a .ZIP archive and subsequently authenticate those files upon extraction. Authenticity Verification (PKWARE AV) information allows you to detect whether a .ZIP file has been compromised. To electronically sign your .ZIP file, you must first obtain and configure PKWARE AV information.

1. If you have already applied for and received AV serial numbers, proceed to step 3. If you have not, complete the Application for Authenticity Verification (authveri.txt) found in the PKZIP for Windows installation directory. You may also access the application via the web at the following URL:

   www.pkware.com/authenticity

2. Complete your application via the aforementioned web address or fax (414-354-8559) your completed application to PKWARE. PKWARE will process your application and send you a confirmation message via the United States Postal Service or FAX containing two (2) serial numbers. These serial numbers are required to configure PKZIP for Authenticity Verification.

3. After you receive your AV confirmation message, you must click:
   Start | Programs | PKZIP | Apply PKWARE AV.

   When running this program you will be prompted to enter your company name and the two (2) serial numbers as they appear in the confirmation message you received from PKWARE. You must enter your company name and the two license keys exactly as they appear in the confirmation message. The check value displayed on your screen should match the check value specified in your confirmation message. If they do no match, repeat step 3.

You may include additional information such as telephone number and address with your AV string by placing an ASCII text file that contains this additional information named avextra.txt in the current working directory. Likewise, this information appears when files are extracted from, or tested in, a. ZIP file. To access this file from a directory other than the current working directory, you may set the following environment variable:

SET PKAVEXTRA=<path to avextra.txt file>

On Windows 98 and Me systems, you can set this variable in the autoexec.bat file. On Windows NT 4, 2000, and XP systems, this variable is set through the control panel.

To compress files with AV information, you must configure the Authentication method in the Security Option dialog.

Application for Authenticity Verification

In order to receive (free of charge) serial numbers to use with the PUTAV program, please fill out and return this form to PKWARE. When the enclosed information is verified, you will receive your serial numbers from PKWARE. Please note that this does not constitute a license from PKWARE to distribute the executable program PKZIP or self-extracting PKSFX files for commercial purposes. See LICENSE.TXT or contact PKWARE, Inc. for more information about distribution licenses for the software.

Please read the entire section on Authenticity Verification before proceeding.

1) Please specify your registration information:

Name:_____

E-mail Address:_____

Company:_____

Title:_____

Address:_____

City:_____ **State/Province:**_____ **ZIP/Postal Code:**_____

Country:_____

Telephone #:(_____)_____

Fax #:(_____)_____

Product Name:_____ **Version:**_____

Approximate date of registration/purchase:_____

2) Please specify the name that you want displayed by PKZIP when an authentic file created by you is verified (51 characters max; Case Sensitive).

*** NOTE: PKZIP displays AV text on ONE line.

Since the purpose of the Authenticity Verification feature is to help provide detection of tampered, hacked or virus infected files, we ask that you provide only your company's name or individual's name for the AV string.

The "avextra.txt" feature was designed to additionally display telephone numbers, addresses, email addresses, and similar information.

Strong Encryption

PKWARE has added the ability to use stronger encryption when compressing files. This new feature adds a higher level of security for your data. If your version of PKZIP is licensed to use this feature, you will be able to choose from several stronger encryption algorithms to encrypt your files. If your copy of PKZIP is not licensed to use this feature, contact PKWARE at 1-414-354-8699, or visit www.pkware.com, for information on how to activate strong encryption.

With strong encryption you can encrypt your files using RC2, RC4, DES, or 3DES algorithms. The version of the Microsoft encryption software installed with your copy of Windows will determine which of these algorithms are available on your system. If your system is configured with the Enhanced Cryptographic Provider, you can configure PKZIP to use any of these algorithms.

> 3DES – 112 bit
> 3DES – 168 bit
> DES
> RC2 – 128 bit
> RC2 – 64 bit
> RC2 – 40 bit
> RC4 – 128 bit
> RC4 – 64 bit
> RC4 – 40 bit

If your system is configured with the Basic Cryptographic Provider, you can configure PKZIP to use any of these algorithms.

> RC2 – 128 bit
> RC2 – 64 bit
> RC2 – 40 bit
> RC4 – 128 bit
> RC4 – 64 bit
> RC4 – 40 bit

Using strong encryption to encrypt your files is as easy as selecting a list of files to compress into a .ZIP file. After configuring your encryption settings, simply create your .ZIP file as you normally do, and your files will be automatically encrypted as they are compressed.

IMPORTANT! PKWARE has introduced support for the use of stronger encryption with .ZIP files. If you plan to share with others the .ZIP files you create using this strong encryption feature, you should first make sure the recipients have a compatible version of PKZIP 5.0 so they can decrypt your files. They will also need to have the same encryption level (40 bit or 128 bit) or higher, of the Microsoft encryption software available in Internet Explorer 4.0, or later.

The strong encryption feature lets you choose to use either a traditional password or an X.509 digital certificate for encryption. If you plan to use a digital certificate, you must first obtain and install a valid digital certificate onto your system. Visit PKWARE's website for information on where you can get a Digital Certificate.

If you plan to use the Digital Signature or Strong Encryption features available with PKZIP for Windows on systems running Windows NT 4.0, you must install Microsoft Internet Explorer 4.0 or greater. PKZIP uses several system security files installed in conjunction with Internet Explorer. Therefore, Internet Explorer, 4.0 or later, must be on your system before you install PKZIP for Windows.

File Capacities

The original .ZIP file format has faithfully met the needs of computer users since it was introduced by PKWARE in 1989. As computer technology has advanced over time, storage capacities have increased dramatically. These increases make the numbers and sizes of files that seemed unimaginable 10 years ago a reality today. In order to extend the utility of the .ZIP file format to meet these changing system needs, PKWARE has extended the .ZIP file format to support more than 65,535 files per archive and archive sizes greater than 4 Gigabytes (GB).

The specification for the .ZIP file format has been publicly available and distributed by PKWARE in a file called APPNOTE.TXT. This file documents the internal data structures and layout that define a .ZIP archive. The extensions introduced by PKWARE fully support all the features of your existing archives and newer versions of PKZIP that support these new extensions will continue to read all of your current archives.

Prior to the 4.5 release, versions of PKZIP were limited to storing no more than 65,535 files in a .ZIP archive. Earlier versions of the original PKZIP for DOS could (and still can) store no more than 16,383 files per .ZIP archive.

Another limitation that existed prior to the 4.5 version of PKZIP was that a single .ZIP archive could not be larger than 4 GB (4,294,967,295 bytes). Earlier versions of PKZIP for DOS cannot process .ZIP archives larger than 2 GB (2,147,483,647 bytes).

The extended .ZIP file format specification available with PKZIP 4.5 supports creating .ZIP archives containing over 4 billion files and with sizes larger than 9 quintillion bytes. These are only theoretical limits and most computer systems in common use today do not have enough storage capacity or available memory to create and store .ZIP archives approaching these limits.

The practical limits imposed by a typical computer in use today and configured with 128MB to 256MB of memory will support compressing up to approximately 262,144 files. Compressing this number of files can take a long time. Since it is not practical to reach the theoretical limits supported by the extended .ZIP file format, PKZIP 4.5 or later, will currently not compress or extract more than 2,147,483,647 files.

The actual limits on the numbers of files and sizes of archives can vary depending on the operating system you are using. The tables below list the capacities available in PKZIP 4.5 for different operating systems.

Windows NT/2000/XP, Unix	Current Version
Archive size	9 EB *
Number of files in archive	2 G **
Number of segments for spanned and split archives	4 G
Size of segments for spanned and split archives	4 GB
PKSFX size	2 GB
PKSFX Patch size	2 GB

Windows 98/Me, Linux	Current Version
Archive size	4 GB *
Number of files in archive	2 G **
Number of segments for spanned and split archives	4 G
Size of segments for spanned and split archives	4 GB
PKSFX size	2 GB
PKSFX Patch size	2 GB

Your available system resources limit the performance you can expect from PKZIP when processing large numbers of files or large archives. If you are compressing large numbers of files on a computer with insufficient memory, you can expect slow, or possibly incomplete processing if your available memory is depleted.

When compressing large files, it is a good idea to make sure you have your temporary folder set to a location on a drive with sufficient disk space available to process large files. It is currently not recommended to use Drag-and-Drop with very large files or with very large numbers of files due to the additional system overhead required when Windows processes the files.

Note: If there are more than 3,767 files, press **PgDn** to see more files.

PKSFX self-extracting file sizes are limited to the size of an executable program file supported by the underlying operating system. This currently is 2 GB for most operating systems. This means you should not create a PKSFX file that is larger than 2 GB. PKZIP will be able to create PKSFX files larger than this limit, however, they won't run on most operating systems. You can create and run split PKSFX files that are larger than 2 GB as long as each split segment is not larger than 2 GB.

Patch files created with PKPatchMaker will not work with files larger than 4 GB. You should not try to create file patches for files larger than 4 GB. If you create a self-extracting patch file, the file limitations are the same as for PKSFX files.

Support for more than 65,535 files in an archive and archive sizes greater than 4 GB are features not available in versions of PKZIP released prior to PKZIP Suite 4.5. If you create archives that take advantage of these new features, you should be aware that older versions of PKZIP will not be able to recognize all of the files in the new archives you create that exceed the capacities of the older programs. If you plan to send a large archive to a friend or associate, they will need a compatible version of PKZIP in order to extract the contents of the file(s) you send.

Versions of PKZIP prior to 4.5 will not recognize these new features and will be unable to view or extract any files in your archives that are dependent on these features. Also, any .ZIP compatible programs you may be using from other companies will not be able to access all of the contents of your large archives. They may report that an archive is too large, or they may incorrectly report that the archive has errors. To ensure access to data in your large archives, always use genuine PKZIP.

* Actual archive size depends upon available storage space – the theoretical limit is 9 EB.
** Actual number of files may vary depending on available memory and resources. The theoretical limit is actually 4 G but the practical limit for most current system configurations is about 262,144 files

Note:
4 GB is equal to 4,294,967,295 bytes
9 EB is equal to 9,223,372,036,854,775,807 bytes